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EXAMINER	
DAVIS, CYNTHIA L	

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/943,283	SPENCER, DOUGLAS A.	
	Examiner	Art Unit	
	Cynthia L. Davis	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11/1/2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-14,16-21,23-32,34-43 and 45-53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1, 3-14, 16-21, 23-32, 34-43, and 45-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 11/1/2005 have been fully considered but they are not persuasive.

Regarding determination of the need for echo cancellation on a per-call basis, a citation to the relevant portion of Ash has been included in the rejections below.

Regarding adjusting echo cancellation based on tail length, Bist discloses and echo canceller that may have its settings reset on a per-session basis that cancels echoes based in part on the echo tail length present in the session (see citations below).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1, 3-14, 16-21, 23-32, 34-43, and 45-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ash in view of Bist.

Regarding claim 1, receiving by one of the plurality of local telecommunication switches a call setup message from one of a first plurality of telephone sets connected to one of a first plurality of local exchange carriers with a first trunk circuit interconnecting the one of the plurality of local telecommunication switches with the one of the first plurality of local exchange carriers, determining by the one of the plurality of local telecommunication switches that the call setup message designates one of a second plurality of telephone sets connected to one of a second plurality of local

exchange carriers as a destination of the call setup message; determining by the one of the plurality of local telecommunication switches in response to the call setup message that a first one of a first plurality of local telephone switching offices of the one of the first plurality of local exchange carriers to which the one of the first plurality of telephone sets is connected requires echo cancellation operations; and providing by the one of the plurality of local telecommunication switches in response to the determination that echo cancellation operations are required for the first one of the first plurality of local telephone switching offices echo cancellation operations for a first call path from the one of the plurality of local telecommunication switches to the first one of the first plurality of the local telephone switching offices of the first one of the plurality of local exchange carriers is disclosed in Ash, figure 1 (showing a typical telecommunications system that contains trunks and would receive calls) and column 4, lines 41-43 (disclosing echo cancellation capability in the trunks that may be activated on a per-call basis), and column 3, lines 57-59 (disclosing activating echo cancellation on a per-call basis). Adjusting the echo cancellation capabilities of the first trunk circuit with respect to an echo tail length upon the first call path being established is missing from Ash. However, Bist discloses in figure 28 and column 50, lines 3-8 and 32-36, an echo canceller than varies its cancellation based on the conditions in the channel, which include echo tail length to be cancelled. It would have been obvious to one skilled in the art at the time of the invention to vary the echo cancellation according to the echo tail length in the path. The motivation would be to cancel the amount of tail length present in the channel for the given session (Bist, column 50, lines 3-8 and 32-36).

Regarding claims 3, 14, and 34, verifying that the first trunk circuit has echo cancellation capabilities; activating the first trunk circuit to provide echo cancellation operations on the first call path is disclosed in Ash, column 4, lines 33-43 (disclosing activating of echo cancellation in the chosen trunk if necessary).

Regarding claims 5, 16, and 36, the one of the plurality of local telecommunication switches comprises a switching network to which the first trunk circuit, a second trunk circuit, and a third trunk circuit are connected where the third trunk circuit is part of a second call path from the one of the plurality of local telecommunication switches to the first one of the second plurality of local telephone switching offices of the one of the second plurality of local exchange carriers and the step of providing comprises the steps of verifying that the second trunk circuit has echo cancellation capabilities, establishing an internal path from the first and second call paths through the first trunk circuit, switching network, second trunk circuit, switching network and third trunk circuit; and enabling the second trunk circuit to provide echo cancellation operations on audio information coming from the third trunk circuit is disclosed in Ash, column 4, lines 33-43 (disclosing a plurality of interconnected trunk circuits on the network, and activation of echo cancellation if necessary).

Regarding claims 7, 17, and 38, one of the plurality of local telecommunication switches comprises a switching network to which the first trunk circuit and a second trunk circuit are connected where the second trunk circuit is part of a second call path from the one of the plurality of local telecommunication switches to the first one of the second plurality of local telephone switching offices of the one of the second plurality of

local exchange carriers and the step of providing comprises the steps of verifying that the second trunk circuit has echo cancellation capabilities, establishing an internal path from the first and second call paths through the first trunk circuit, switching network and a second trunk circuit; and enabling the second trunk circuit to provide echo cancellation operations on audio information coming from the first trunk circuit is disclosed in Ash, column 4, lines 33-43 (disclosing a plurality of interconnected trunk circuits on the network, and activation of echo cancellation if necessary).

Regarding claims 9, 18, and 40, the one of the plurality of local telecommunication switches comprises a switching network to which the first trunk circuit, a second trunk circuit, and a third trunk circuit are connected where the third trunk circuit is part of a second call path from the one of the plurality of local telecommunication switches to the first one of the second plurality of local telephone switching offices of the one of the second plurality of local exchange carriers and the step of providing comprises the steps of verifying that the second trunk circuit has echo cancellation capabilities, establishing an internal path from the first and second call paths through the first trunk circuit, switching network, second trunk circuit, switching network and third trunk circuit, enabling the second trunk circuit to provide echo cancellation operations on audio information coming from the first trunk circuit, determining by the one of the plurality of local telecommunication switches in response to the call setup message that a first one of the plurality of local telephone switching offices of the one of the second plurality of local exchange carriers to which the one of the second plurality of telephone sets is connected requires echo cancellation

operations, and enabling the third trunk circuit to provide echo cancellation operations on audio information coming from the second call path is disclosed in Ash, column 4, lines 33-43 (disclosing a plurality of interconnected trunk circuits on the network, and activation of echo cancellation if necessary).

Regarding claims 11 and 19, one of the plurality of local telecommunication switches comprises a switching network to which the first trunk circuit and a second trunk circuit are connected where the second trunk circuit is part of a second call path from the one of the plurality of local telecommunication switches to the first one of the second plurality of local telephone switching offices of the one of the second plurality of local exchange carriers and the step of providing comprises the steps of verifying that the second trunk circuit has echo cancellation capabilities, establishing an internal path from the first and second call paths through the first trunk circuit, switching network, and second trunk circuit, enabling the first trunk circuit to provide echo cancellation operations on audio information coming from the first call path; determining by the one of the plurality of local telecommunication switches in response to the call setup message that the first one of the second plurality of local telephone switching offices of the one of the second plurality of local exchange carriers to which the one of the second plurality of telephone sets is connected requires echo cancellation operations, and enabling the second trunk circuit to provide echo cancellation operations on audio information coming from the second call path is disclosed in Ash, column 4, lines 33-43 (disclosing a plurality of interconnected trunk circuits on the network, and activation of echo cancellation if necessary).

Regarding claim 13, receiving by one of the plurality of local telecommunication switches a call setup message from one of a first plurality of telephone sets connected to one of a first plurality of local exchange carriers via the third plurality of local exchange carriers and the second one of the plurality of local telecommunication switches and a first trunk circuit interconnecting the first one of the plurality of local telecommunication switches with the third one of the plurality of local exchange carriers, determining by the first one of the plurality of local telecommunication switches that the call setup message designates one of a second plurality of telephone sets connected to one of a second plurality of local telephone switching offices of one of a second plurality of local exchange carriers as a destination of the call setup message; determining by the first one of the plurality of local telecommunication switches in response to the call setup message that a first one of a first plurality of local telephone switching offices of the one of the first plurality of local exchange carriers to which the one of the first plurality of telephone sets is connected requires echo cancellation operations; and providing by the first one of the plurality of local telecommunication switches in response to the determination that echo cancellation operations are required for the first one of the first plurality of local telephone switching offices echo cancellation operations for a first call path from the first one of the plurality of local telecommunication switches to the first one of the first plurality of the local telephone switching offices of the first one of the plurality of local exchange carriers is disclosed in Ash, figure 1 (showing a typical telecommunications system that contains trunks and would receive calls) and column 4, lines 42-43 (disclosing echo cancellation capability in the trunks). Adjusting the echo

cancellation capabilities of the first trunk circuit with respect to an echo tail length upon the first call path being established is missing from Ash. However, Bist discloses in figure 28 and column 50, lines 3-8 and 32-36, an echo canceller than varies its cancellation based on the conditions in the channel, which include echo tail length to be cancelled. It would have been obvious to one skilled in the art at the time of the invention to vary the echo cancellation according to the echo tail length in the path. The motivation would be to cancel the amount of tail length present in the channel for the given session (Bist, column 50, lines 3-8 and 32-36).

Regarding claim 32, means for receiving by one of the plurality of local telecommunication switches a call setup message from one of a first plurality of telephone sets connected to one of a first plurality of local exchange carriers with a first trunk circuit interconnecting the one of the plurality of local telecommunication switches with the one of the first plurality of local exchange carriers, means for determining by the one of the plurality of local telecommunication switches that the call setup message designates one of a second plurality of telephone sets connected to one of a second plurality of local exchange carriers as a destination of the call setup message, means for determining by the one of the plurality of local telecommunication switches in response to the call setup message that a first one of a first plurality of local telephone switching offices of the one of the first plurality of local exchange carriers to which the one of the first plurality of telephone sets is connected requires echo cancellation operations, and means for providing by the one of the plurality of local telecommunication switches in response to the determination that echo cancellation

operations are required for the first one of the first plurality of local telephone switching offices echo cancellation operations for a first call path from the one of the plurality of local telecommunication switches to the first one of the first plurality of the local telephone switching offices of the first one of the plurality of local exchange carriers is disclosed in Ash, figure 1 (showing a typical telecommunications system that contains trunks and would receive calls) and column 4, lines 42-43 (disclosing echo cancellation capability in the trunks). Adjusting the echo cancellation capabilities of the first trunk circuit with respect to an echo tail length upon the first call path being established is missing from Ash. However, Bist discloses in figure 28 and column 50, lines 3-8 and 32-36, an echo canceller than varies its cancellation based on the conditions in the channel, which include echo tail length to be cancelled. It would have been obvious to one skilled in the art at the time of the invention to vary the echo cancellation according to the echo tail length in the path. The motivation would be to cancel the amount of tail length present in the channel for the given session (Bist, column 50, lines 3-8 and 32-36).

Regarding claims 4 and 35, adjusting the echo cancellation capabilities of the first trunk circuit with respect to an echo tail length for the first call path is missing from Ash. However, this is disclosed in Bist, figure 28 and column 50, lines 32-36 (disclosing different settings of echo cancellation for different tail lengths). It would have been obvious to one skilled in the art at the time of the invention to base the echo cancellation on the tail length. The motivation would be to remove the source of the echo.

Regarding claims 6 and 37, adjusting the echo cancellation capabilities of the second trunk circuit with respect to an echo tail length for the second call path is missing from Ash. However, this is disclosed in Bist, figure 28 and column 50, lines 32-36 (disclosing different settings of echo cancellation for different tail lengths). It would have been obvious to one skilled in the art at the time of the invention to base the echo cancellation on the tail length. The motivation would be to remove the source of the echo.

Regarding claims 8 and 39, adjusting the echo cancellation capabilities of the first trunk circuit with respect to an echo tail length for the first call path is missing from Ash. However, this is disclosed in Bist, figure 28 and column 50, lines 32-36 (disclosing different settings of echo cancellation for different tail lengths). It would have been obvious to one skilled in the art at the time of the invention to base the echo cancellation on the tail length. The motivation would be to remove the source of the echo.

Regarding claims 10 and 41, adjusting the echo cancellation capabilities of the third trunk circuit with respect to an echo tail length for the second call path is missing from Ash. However, this is disclosed in Bist, figure 28 and column 50, lines 32-36 (disclosing different settings of echo cancellation for different tail lengths). It would have been obvious to one skilled in the art at the time of the invention to base the echo cancellation on the tail length. The motivation would be to remove the source of the echo.

Regarding claim 12, adjusting the echo cancellation capabilities of the second trunk circuit with respect to an echo tail length for the second call path is missing from

Ash. However, this is disclosed in Bist, figure 28 and column 50, lines 32-36 (disclosing different settings of echo cancellation for different tail lengths). It would have been obvious to one skilled in the art at the time of the invention to base the echo cancellation on the tail length. The motivation would be to remove the source of the echo.

Regarding claim 20, a method for controlling echoes within a telecommunication switching system having a plurality of local exchange carriers, a wide area network, pluralities of softphones, a plurality of remote switches, and a plurality of local telecommunication switches where each of the plurality of local exchange carriers is connected to a plurality of telephone sets attached to a plurality of local telephone switching offices of each of the plurality of local exchange carriers and each of the plurality of local telecommunication switches is connected to a plurality of telephone sets and each of the plurality of remote switches is connected to a first plurality of softphones, comprising the steps of: connecting the plurality of remote switches to each of the plurality of local telecommunication switches via the wide area network; providing echo cancellation circuits in each of the plurality of remote switches with each echo cancellation circuit having an echo tail length adjusted to eliminate an echo produced by each of the first plurality of softphones; connecting each of a second plurality of softphones to each of the plurality of local telecommunication switches via the wide area network; providing an echo cancellation circuit in each of the second plurality of softphones to eliminate an echo produced by each of the second plurality of softphones, connecting one of the plurality of local exchange carriers to the wide area network via one of the plurality of local telecommunication switches with the one of the plurality of

local exchange carriers interconnected to the one of the plurality of local telecommunication switches by a plurality of trunk circuits in the one of the plurality of local telecommunication switches; and providing echo cancellation operations in each of the plurality of trunk circuits adjusted to eliminate echoes produced by the one of the plurality of local exchange carriers on an individual call path basis is disclosed in Ash, figure 1 (showing a typical telecommunications system that contains trunks and would receive calls) and column 4, lines 42-43 (disclosing echo cancellation capability in the trunks on a per call basis). Having an echo tail length adjusted is missing from Ash. However, this is disclosed in Bist, figure 28 and column 50, lines 32-36 (disclosing different settings of echo cancellation for different tail lengths). It would have been obvious to one skilled in the art at the time of the invention to base the echo cancellation on the tail length. The motivation would be to remove the source of the echo. Adjusting the echo cancellation capabilities of the first trunk circuit with respect to an echo tail length upon the first call path being established is missing from Ash. However, Bist discloses in figure 28 and column 50, lines 3-8 and 32-36, an echo canceller than varies its cancellation based on the conditions in the channel, which include echo tail length to be cancelled. It would have been obvious to one skilled in the art at the time of the invention to vary the echo cancellation according to the echo tail length in the path. The motivation would be to cancel the amount of tail length present in the channel for the given session (Bist, column 50, lines 3-8 and 32-36).

Regarding claims 21 and 43, determining by the one of the plurality of local telecommunication switches that a call setup message received from the one of the

plurality of local exchange carriers via one of the plurality of trunk circuits designates one of the first plurality of softphones connected to the one of the plurality of the local exchange carriers, determining by the one of the plurality of local telecommunication switches in response to the call setup message that a first one of a plurality of local telephone switching offices of the one of the first plurality of local exchange carriers to which the one of the plurality of telephone sets is connected requires echo cancellation operations, and enabling the one of the plurality of trunk circuits to provide an echo cancellation operation for a telephone call associated with the call setup message is disclosed in Ash, column 4, lines 33-43 (disclosing a plurality of interconnected trunk circuits on the network, and activation of echo cancellation if necessary).

Regarding claims 23 and 45, the one of the plurality of local telecommunication switches is connected to the wide area network by a Internet Protocol trunk circuit and the step of providing the echo cancellation operation further comprises providing an additional echo cancellation operation in the Internet Protocol trunk circuit is missing from Ash. However, Bist discloses in figure 28 and column 50, lines 32-36, and column 10, line 58, echo cancellation in an IP network. It would have been obvious to one skilled in the art at the time of the invention to connect to the WAN using an IP trunk and provide echo cancellation on the trunk. The motivation would be to provide echo-free calling on a common type of connection.

Regarding claims 24 and 46, the one of the plurality of local telecommunication switches is connected to the wide area network by a trunk circuit and the step of providing echo cancellation operation in the trunk circuit comprises the steps of

determining by the one of the plurality of local telecommunication switches that a call setup message received from the one of the plurality of local exchange carriers via one of the plurality of trunk circuits designates one of the first plurality of softphones connected to the one of the plurality of the local exchange carriers, determining by the one of the plurality of local telecommunication switches in response to the call setup message that a first one of a plurality of local telephone switching offices of the one of the first plurality of local exchange carriers to which the one of the plurality of telephone sets is connected requires echo cancellation operations, and enabling the trunk circuit to provide an echo cancellation operation for a telephone call associated with the call setup message is disclosed in Ash, column 4, lines 33-43 (disclosing a plurality of interconnected trunk circuits on the network, and activation of echo cancellation if necessary). However, that the trunk is an IP trunk is missing from Ash. Bist discloses in figure 28 and column 50, lines 32-36, and column 10, line 58, echo cancellation in an IP network. It would have been obvious to one skilled in the art at the time of the invention to connect to the WAN using an IP trunk and provide echo cancellation on the trunk. The motivation would be to provide echo-free calling on a common type of connection.

Regarding claims 25 and 47, adjusting the echo cancellation capabilities of the Internet Protocol trunk circuit with respect to an echo tail length for the first call path is missing from Ash. However, this is disclosed in Bist, figure 28 and column 50, lines 32-36 (disclosing different settings of echo cancellation for different tail lengths). It would have been obvious to one skilled in the art at the time of the invention to base the echo

cancellation on the tail length. The motivation would be to remove the source of the echo.

Regarding claims 26 and 48, providing an additional echo cancellation operation in the one of the plurality of trunk circuits is disclosed in Ash, column 4, lines 42-43 (disclosing echo cancellation capability in the trunks).

Regarding claims 27 and 49, adjusting the echo cancellation capabilities of the one of the plurality of trunk circuits is disclosed in Ash, column 4, lines 42-43 (disclosing echo cancellation capability in the trunks).

Regarding claims 28 and 50, the one of the plurality of local telecommunication switches is connected to the wide area network by a trunk circuit and the step of providing echo cancellation operation in the trunk circuit comprises the steps of further determining by the one of the plurality of local telecommunication switches that another call setup message received from the one of the plurality of local exchange carriers via one of the plurality of trunk circuits designates one of the second plurality of softphones connected to the one of the plurality of the local exchange carriers; determining by the one of the plurality of local telecommunication switches in response to the call setup message that a first one of a plurality of local telephone switching offices of the one of the first plurality of local exchange carriers to which the one of the plurality of telephone sets is connected requires echo cancellation operations; and enabling the trunk circuit to provide an echo cancellation operation for a telephone call associated with the other call setup message is disclosed in Ash, column 4, lines 33-43 (disclosing a plurality of interconnected trunk circuits on the network, and activation of echo cancellation if

necessary). However, that the trunk is an IP trunk is missing from Ash. Bist discloses in figure 28 and column 50, lines 32-36, and column 10, line 58, echo cancellation in an IP network. It would have been obvious to one skilled in the art at the time of the invention to connect to the WAN using an IP trunk and provide echo cancellation on the trunk. The motivation would be to provide echo-free calling on a common type of connection.

Regarding claims 29 and 51, adjusting the echo cancellation capabilities of the Internet Protocol trunk circuit with respect to an echo tail length for the first call path is missing from Ash. However, this is disclosed in Bist, figure 28 and column 50, lines 32-36 (disclosing different settings of echo cancellation for different tail lengths). It would have been obvious to one skilled in the art at the time of the invention to base the echo cancellation on the tail length. The motivation would be to remove the source of the echo.

Regarding claims 30 and 52, providing an additional echo cancellation operation in the one of the plurality of trunk circuits is disclosed in Ash, column 4, lines 42-43 (disclosing echo cancellation capability in the trunks).

Regarding claims 31 and 53, adjusting the echo cancellation capabilities of the one of the plurality of trunk circuits is disclosed in Ash, column 4, lines 42-43 (disclosing echo cancellation capability in the trunks).

Regarding claim 42, an apparatus for controlling echoes within a telecommunication switching system having a plurality of local exchange carriers, a wide area network, pluralities of softphones, a plurality of remote switches, and a

plurality of local telecommunication switches where each of the plurality of local exchange carriers is connected to a plurality of telephone sets attached to a plurality of local telephone switching offices of each of the plurality of local exchange carriers and each of the plurality of local telecommunication switches is connected to a plurality of telephone sets and each of the plurality of remote switches is connected to a first plurality of softphones, comprising: means for connecting the plurality of remote switches to each of the plurality of local telecommunication switches via the wide area network, means for providing echo cancellation circuits in each of the plurality of remote switches with each echo cancellation circuit having an echo tail length adjusted to eliminate an echo produced by each of the first plurality of softphones, means for connecting each of a second plurality of softphones to each of the plurality of local telecommunication switches via the wide area network, means for providing an echo cancellation circuit in each of the second plurality of softphones eliminating an echo produced by each of the second plurality of softphones, means for connecting one of the plurality of local exchange carriers to the wide area network via one of the plurality of local telecommunication switches with the one of the plurality of local exchange carriers interconnected to the one of the plurality of local telecommunication switches by a plurality of trunk circuits in the one of the plurality of local telecommunication switches, and means for providing echo cancellation operations in each of the plurality of trunk circuits adjusted to eliminate echoes produced by the one of the plurality of local exchange carriers on an individual call path basis is disclosed in Ash, figure 1 (showing a typical telecommunications system that contains trunks and would receive calls) and

column 4, lines 42-43 (disclosing echo cancellation capability in the trunks on a per call basis). Having an echo tail length adjusted is missing from Ash. However, this is disclosed in Bist, figure 28 and column 50, lines 32-36 (disclosing different settings of echo cancellation for different tail lengths). It would have been obvious to one skilled in the art at the time of the invention to base the echo cancellation on the tail length. The motivation would be to remove the source of the echo. Adjusting the echo cancellation capabilities of the first trunk circuit with respect to an echo tail length upon the first call path being established is missing from Ash. However, Bist discloses in figure 28 and column 50, lines 3-8 and 32-36, an echo canceller than varies its cancellation based on the conditions in the channel, which include echo tail length to be cancelled. It would have been obvious to one skilled in the art at the time of the invention to vary the echo cancellation according to the echo tail length in the path. The motivation would be to cancel the amount of tail length present in the channel for the given session (Bist, column 50, lines 3-8 and 32-36).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia L Davis whose telephone number is (571) 272-3117. The examiner can normally be reached on 8:30 to 6, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CLD
12/29/2005 CLD 12/29/05

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